

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1035549

Luminaire Tested: S125DIW-B850D1050UB40-4F0-XX-W2A-F

Issue Date: 5/6/2025

**Test Information**

Test Method: LM-79-2019  
Report Number: P1035549  
REPORT IS A COMBINATION OF REPORTS P1004093 AND P1007351  
Test Lab: INNOVATION CENTER  
Issue Date: 5/6/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S125DIW-B850D1050UB40-4F0-XX-W2A-F  
Description: Define 5 Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865} {m-EER=0.951}  
Light Source: -  
Ballast/Driver: -

**Summary**

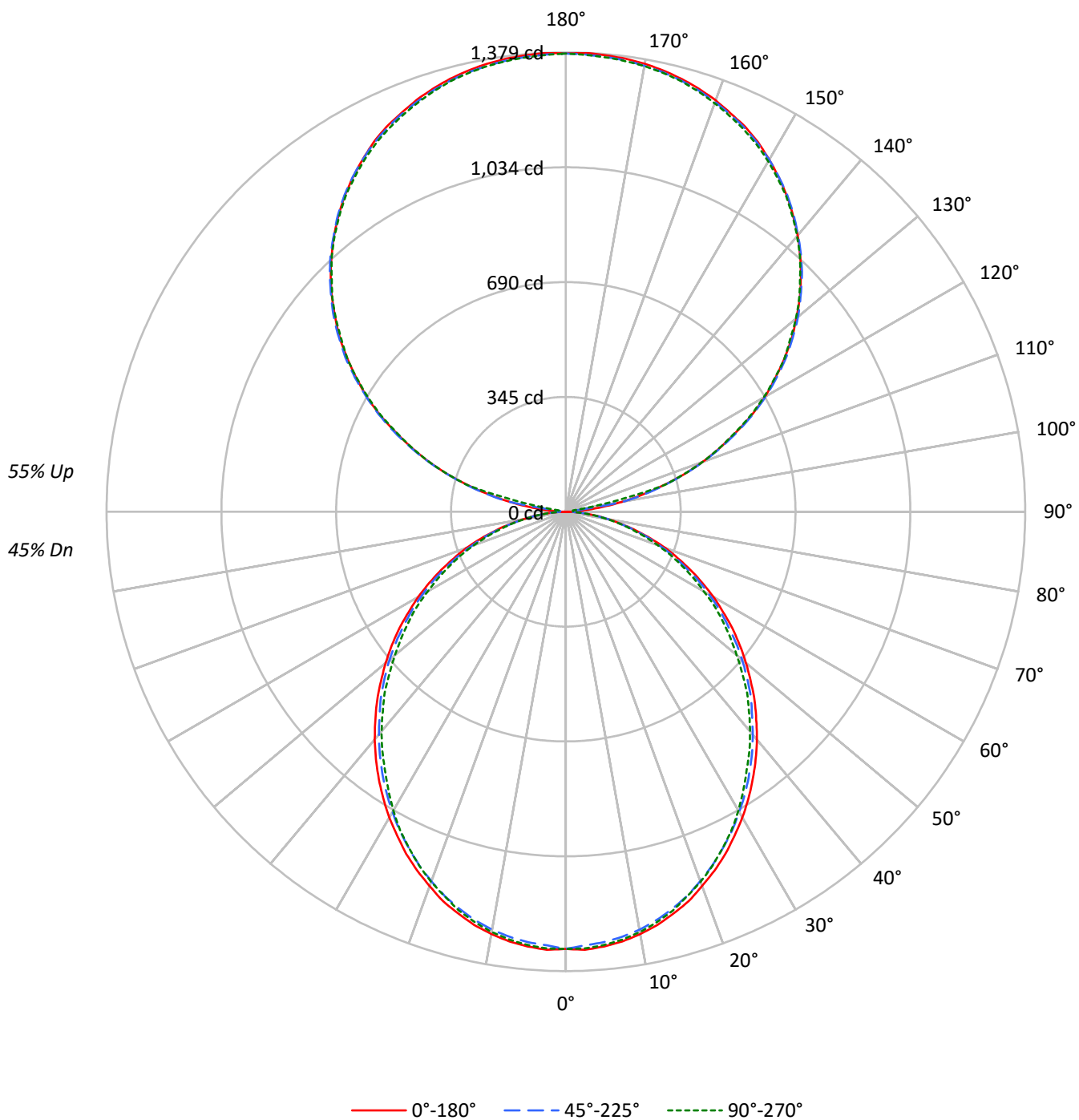
Lumens per Lamp: N/A  
Luminaire Lumens: 7643.0 lumens  
Efficiency: N/A  
Efficacy: 113.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.18 / 1.3  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.1')  
CIE Type: General Diffuse

Input Watts (W): 67.4  
Input Voltage (V):  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

TEST NUMBER: P1035549

CATALOG NUMBER: S125DIW-B850D1050UB40-4F0-XX-W2A-F

### Luminous Intensity Polar Plot



TEST NUMBER: P1035549

CATALOG NUMBER: S125DIW-B850D1050UB40-4F0-XX-W2A-F

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |
|-----|-----|-----|-----|-----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| RF  | 20  |     |     |     | 20 |    |    |    | 20 |    |    |    | 20 |    |    |    | 20 |
| RC  | 80  |     |     |     | 70 |    |    |    | 50 |    |    |    | 30 |    |    |    | 10 |
| RW  | 70  | 50  | 30  | 10  | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR |     |     |     |     |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 0   | 106 | 106 | 106 | 106 | 97 | 97 | 97 | 97 | 80 | 80 | 80 | 65 | 65 | 65 | 51 | 51 | 51 |
| 1   | 97  | 92  | 88  | 85  | 88 | 85 | 81 | 78 | 70 | 68 | 66 | 57 | 56 | 54 | 45 | 44 | 43 |
| 2   | 88  | 80  | 74  | 69  | 80 | 74 | 69 | 64 | 62 | 58 | 54 | 50 | 48 | 45 | 40 | 38 | 36 |
| 3   | 80  | 71  | 63  | 58  | 73 | 65 | 59 | 54 | 54 | 50 | 46 | 44 | 41 | 38 | 35 | 33 | 31 |
| 4   | 73  | 63  | 55  | 49  | 67 | 58 | 51 | 45 | 48 | 43 | 39 | 40 | 36 | 33 | 31 | 29 | 27 |
| 5   | 67  | 56  | 48  | 42  | 61 | 51 | 44 | 39 | 43 | 38 | 34 | 35 | 31 | 28 | 28 | 25 | 23 |
| 6   | 62  | 50  | 42  | 36  | 56 | 46 | 39 | 34 | 39 | 33 | 29 | 32 | 28 | 25 | 26 | 23 | 20 |
| 7   | 57  | 45  | 37  | 32  | 52 | 42 | 35 | 30 | 35 | 30 | 26 | 29 | 25 | 22 | 23 | 20 | 18 |
| 8   | 53  | 41  | 33  | 28  | 48 | 38 | 31 | 26 | 32 | 27 | 23 | 27 | 22 | 19 | 22 | 18 | 16 |
| 9   | 49  | 37  | 30  | 25  | 45 | 35 | 28 | 23 | 29 | 24 | 20 | 24 | 20 | 17 | 20 | 17 | 15 |
| 10  | 46  | 34  | 27  | 22  | 42 | 32 | 25 | 21 | 27 | 22 | 18 | 23 | 19 | 16 | 18 | 15 | 13 |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 8407 | 8407 | 8407 |
| 5°  | 8407 | 8211 | 8227 |
| 10° | 8338 | 8023 | 7998 |
| 15° | 8228 | 7798 | 7728 |
| 20° | 8080 | 7537 | 7418 |
| 25° | 7921 | 7252 | 7087 |
| 30° | 7729 | 6955 | 6738 |
| 35° | 7525 | 6645 | 6347 |
| 40° | 7313 | 6316 | 5999 |
| 45° | 7084 | 5996 | 5629 |
| 50° | 6833 | 5632 | 5198 |
| 55° | 6583 | 5231 | 4802 |
| 60° | 6285 | 4809 | 4341 |
| 65° | 5930 | 4320 | 3865 |
| 70° | 5567 | 3757 | 3315 |
| 75° | 4959 | 3095 | 2681 |
| 80° | 4227 | 2311 | 1972 |
| 85° | 3265 | 1366 | 1086 |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 7084 cd/sqm

TEST NUMBER: P1035549

CATALOG NUMBER: S125DIW-B850D1050UB40-4F0-XX-W2A-F

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 123.8  | 1.6       |
| 10°-20°   | 349.7  | 4.6       |
| 20°-30°   | 516.3  | 6.8       |
| 30°-40°   | 602.4  | 7.9       |
| 40°-50°   | 605.0  | 7.9       |
| 50°-60°   | 531.1  | 6.9       |
| 60°-70°   | 395.6  | 5.2       |
| 70°-80°   | 225.9  | 3.0       |
| 80°-90°   | 67.3   | 0.9       |
| 90°-100°  | 46.7   | 0.6       |
| 100°-110° | 310.5  | 4.1       |
| 110°-120° | 559.1  | 7.3       |
| 120°-130° | 717.7  | 9.4       |
| 130°-140° | 771.9  | 10.1      |
| 140°-150° | 724.4  | 9.5       |
| 150°-160° | 586.0  | 7.7       |
| 160°-170° | 379.0  | 5.0       |
| 170°-180° | 130.7  | 1.7       |
| 0°-30°    | 989.8  | 13.0      |
| 0°-40°    | 1592.2 | 20.8      |
| 0°-60°    | 2728.3 | 35.7      |
| 0°-90°    | 3417.0 | 44.7      |
| 90°-120°  | 916.3  | 12.0      |
| 90°-150°  | 3130.3 | 41.0      |
| 90°-180°  | 4226.0 | 55.3      |
| 0°-180°   | 7643.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 1312 | 1312  | 1312 | 1312  | 1312 |      |
| 5°   | 1310 | 1308  | 1298 | 1307  | 1306 | 124  |
| 15°  | 1249 | 1246  | 1234 | 1239  | 1239 | 352  |
| 25°  | 1134 | 1128  | 1115 | 1117  | 1114 | 522  |
| 35°  | 979  | 975   | 960  | 955   | 947  | 612  |
| 45°  | 801  | 797   | 785  | 772   | 769  | 617  |
| 55°  | 610  | 607   | 593  | 583   | 576  | 545  |
| 65°  | 412  | 410   | 399  | 389   | 385  | 409  |
| 75°  | 219  | 217   | 212  | 209   | 204  | 233  |
| 85°  | 57   | 58    | 58   | 57    | 55   | 63   |
| 90°  | 1    | 9     | 16   | 21    | 24   | 7    |
| 95°  | 58   | 55    | 16   | 21    | 21   | 71   |
| 105° | 300  | 304   | 304  | 304   | 303  | 318  |
| 115° | 563  | 568   | 569  | 565   | 559  | 558  |
| 125° | 801  | 808   | 808  | 804   | 801  | 715  |
| 135° | 998  | 1004  | 1002 | 1000  | 994  | 770  |
| 145° | 1158 | 1160  | 1160 | 1161  | 1154 | 724  |
| 155° | 1275 | 1269  | 1271 | 1274  | 1266 | 587  |
| 165° | 1345 | 1339  | 1340 | 1346  | 1338 | 380  |
| 175° | 1376 | 1370  | 1371 | 1379  | 1370 | 131  |
| 180° | 1376 | 1376  | 1376 | 1376  | 1376 |      |

TEST NUMBER: P1035549

CATALOG NUMBER: S125DIW-B850D1050UB40-4F0-XX-W2A-F

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 1312.1 | 1312.1 | 1312.1 | 1312.1 | 1312.1 |
| 2.5°   | 1316.2 | 1313.1 | 1302.7 | 1313.1 | 1312.1 |
| 5°     | 1310.0 | 1307.9 | 1297.5 | 1306.9 | 1305.8 |
| 7.5°   | 1300.7 | 1298.6 | 1287.2 | 1296.5 | 1295.5 |
| 10°    | 1287.2 | 1285.1 | 1273.7 | 1282.0 | 1280.9 |
| 12.5°  | 1270.6 | 1266.4 | 1256.0 | 1262.2 | 1262.2 |
| 15°    | 1248.8 | 1245.6 | 1234.2 | 1239.4 | 1239.4 |
| 17.5°  | 1225.9 | 1220.7 | 1209.3 | 1215.5 | 1210.3 |
| 20°    | 1195.8 | 1193.7 | 1180.2 | 1187.5 | 1182.3 |
| 22.5°  | 1165.7 | 1161.6 | 1149.1 | 1153.3 | 1150.1 |
| 25°    | 1133.5 | 1128.3 | 1114.8 | 1116.9 | 1113.8 |
| 27.5°  | 1096.2 | 1093.0 | 1079.6 | 1080.6 | 1077.5 |
| 30°    | 1059.8 | 1056.7 | 1041.1 | 1039.1 | 1036.0 |
| 32.5°  | 1020.4 | 1015.2 | 1001.7 | 997.5  | 991.3  |
| 35°    | 978.9  | 974.7  | 960.2  | 955.0  | 946.7  |
| 37.5°  | 936.3  | 931.1  | 917.6  | 910.4  | 905.2  |
| 40°    | 892.7  | 887.5  | 873.0  | 863.6  | 860.5  |
| 42.5°  | 846.0  | 841.8  | 827.3  | 819.0  | 813.8  |
| 45°    | 801.4  | 797.2  | 784.8  | 772.3  | 769.2  |
| 47.5°  | 752.6  | 753.6  | 738.0  | 725.6  | 718.3  |
| 50°    | 705.9  | 702.7  | 690.3  | 676.8  | 669.5  |
| 52.5°  | 658.1  | 656.0  | 642.5  | 631.1  | 622.8  |
| 55°    | 610.4  | 607.2  | 592.7  | 583.4  | 576.1  |
| 57.5°  | 559.5  | 558.5  | 546.0  | 533.5  | 530.4  |
| 60°    | 511.7  | 507.6  | 496.2  | 485.8  | 478.5  |
| 62.5°  | 461.9  | 458.8  | 449.5  | 438.0  | 432.9  |
| 65°    | 412.1  | 410.0  | 398.6  | 389.3  | 385.1  |
| 67.5°  | 363.3  | 359.2  | 350.9  | 342.6  | 340.5  |
| 70°    | 317.6  | 312.4  | 303.1  | 296.9  | 292.7  |
| 72.5°  | 267.8  | 264.7  | 259.5  | 252.2  | 248.1  |
| 75°    | 219.0  | 216.9  | 211.8  | 208.6  | 204.5  |
| 77.5°  | 173.4  | 172.3  | 169.2  | 167.1  | 164.0  |
| 80°    | 130.8  | 130.8  | 128.7  | 127.7  | 125.6  |
| 82.5°  | 93.4   | 91.3   | 91.3   | 89.3   | 89.3   |
| 85°    | 57.1   | 58.1   | 58.1   | 57.1   | 55.0   |
| 87.5°  | 28.0   | 28.0   | 27.0   | 27.0   | 24.9   |
| 90°    | 1.0    | 9.2    | 16.3   | 21.4   | 24.5   |
| 92.5°  | 19.4   | 10.2   | 16.3   | 21.4   | 22.4   |
| 95°    | 58.1   | 55.1   | 16.3   | 21.4   | 21.4   |
| 97.5°  | 109.1  | 115.2  | 18.4   | 20.4   | 21.4   |
| 100°   | 170.3  | 173.4  | 177.4  | 25.5   | 21.4   |
| 102.5° | 232.5  | 236.6  | 238.6  | 240.7  | 155.0  |
| 105°   | 299.8  | 303.9  | 303.9  | 303.9  | 302.9  |
| 107.5° | 369.2  | 369.2  | 371.2  | 372.2  | 368.2  |
| 110°   | 436.5  | 436.5  | 438.5  | 435.5  | 436.5  |

TEST NUMBER: P1035549

CATALOG NUMBER: S125DIW-B850D1050UB40-4F0-XX-W2A-F

**CANDELA DISTRIBUTION (continued):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 112.5° | 499.7  | 502.8  | 503.8  | 499.7  | 497.7  |
| 115°   | 562.9  | 568.0  | 569.1  | 565.0  | 558.9  |
| 117.5° | 629.2  | 629.2  | 633.3  | 627.2  | 625.1  |
| 120°   | 690.4  | 689.4  | 692.5  | 690.4  | 685.3  |
| 122.5° | 744.5  | 749.6  | 750.6  | 748.5  | 742.4  |
| 125°   | 800.6  | 807.7  | 807.7  | 803.6  | 800.6  |
| 127.5° | 854.6  | 859.7  | 858.7  | 856.6  | 848.5  |
| 130°   | 903.6  | 908.7  | 909.7  | 906.6  | 901.5  |
| 132.5° | 952.5  | 958.6  | 955.6  | 955.6  | 950.5  |
| 135°   | 998.4  | 1004.5 | 1002.5 | 1000.4 | 994.3  |
| 137.5° | 1041.2 | 1047.4 | 1045.3 | 1045.3 | 1040.2 |
| 140°   | 1083.0 | 1085.1 | 1084.1 | 1086.1 | 1080.0 |
| 142.5° | 1120.8 | 1121.8 | 1123.8 | 1123.8 | 1117.7 |
| 145°   | 1157.5 | 1159.5 | 1159.5 | 1160.6 | 1154.4 |
| 147.5° | 1190.1 | 1190.1 | 1191.1 | 1192.2 | 1185.0 |
| 150°   | 1220.7 | 1218.7 | 1220.7 | 1222.8 | 1214.6 |
| 152.5° | 1250.3 | 1245.2 | 1247.2 | 1249.3 | 1242.1 |
| 155°   | 1274.8 | 1268.7 | 1270.7 | 1273.8 | 1265.6 |
| 157.5° | 1294.1 | 1291.1 | 1291.1 | 1294.1 | 1286.0 |
| 160°   | 1314.5 | 1308.4 | 1309.4 | 1313.5 | 1305.4 |
| 162.5° | 1330.9 | 1324.7 | 1325.8 | 1331.9 | 1322.7 |
| 165°   | 1345.1 | 1339.0 | 1340.0 | 1346.2 | 1338.0 |
| 167.5° | 1356.4 | 1350.2 | 1351.3 | 1358.4 | 1349.2 |
| 170°   | 1365.5 | 1358.4 | 1359.4 | 1367.6 | 1358.4 |
| 172.5° | 1371.7 | 1364.5 | 1366.6 | 1373.7 | 1364.5 |
| 175°   | 1375.7 | 1369.6 | 1370.6 | 1378.8 | 1369.6 |
| 177.5° | 1378.8 | 1372.7 | 1373.7 | 1380.8 | 1372.7 |
| 180°   | 1375.7 | 1375.7 | 1375.7 | 1375.7 | 1375.7 |

(END OF REPORT)